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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,438	02/02/2001	Peter Snawerdt	514.1003	9409

7590

07/09/2004

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EXAMINER

PHAN, HANH

ART UNIT PAPER NUMBER

2633

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,438

Applicant(s)

SNAWERDT, PETER

Examiner

Hanh Phan

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-10 and 15-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-3,5-10 and 15-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 04/09/2004.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-3, 5-9 and 15-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,665,500 (Snawerdt). Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations recited in claims 1-3, 5-10 and 15-24 of the instant application are encompassed by claims 1-19 of US Patent No. 6,665,500 (Snawerdt).

Regarding claims 1, 5, 9, 17, 18 and 22-24, Snawerdt (US Patent No. 6,665,500) discloses a card for transmitting data over at least one optical fiber, the card comprising:

a transmitter having at least one light source and a phase modulator for phase modulating light from the source so as to create phase-modulated optical signals in the light as a function of an input electronic data stream;

a receiver having an interferometer for reading received optical signals , the interferometer having a delay loop fiber; and

a securing device for securing the delay loop fiber (see claims 1-19 of Snawerdt).

Regarding claims 2 and 20, Snawerdt discloses wherein the at least one light is a laser (see claim 1 of Snawerdt).

Regarding claims 3 and 21, Snawerdt discloses further including an energy level detector (see claim 15 of Snawerdt).

Regarding claim 6, Snawerdt discloses further including a circuit having a delayed feedback exclusive-or gate (see claim 16 of Snawerdt).

Regarding claim 7, Snawerdt discloses wherein the interferometer includes a splitter and a coupler (see claims 3 and 10 of Snawerdt).

Regarding claim 8, Snawerdt discloses wherein the card includes backplane made from a printed circuit board (see claims 1-19 of Snawerdt).

Regarding claims 15, 16 and 19, Snawerdt discloses a switch for switching between an amplitude-modulated mode and a phase modulated mode (see claims 1-19 of Snawerdt).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "**the delay loop fiber**" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 5, 7, 8, 10, 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al (US Patent No. 6,271,950) in view of Spanke (US Patent No. 5,572,350) and further in view of Choy et al (US Patent No. 5,825,949).

Regarding claims 1, 5, 18 and 22, referring to Figure 1, Hansen discloses a device for transmitting data over at least one optical fiber, the device comprising:

a transmitter having at least one light source (i.e., CW laser 105, Fig. 1) and a phase modulator (i.e., phase modulator 106, Fig. 1) for phase modulating light from the source so as to create phase-modulated optical signals in the light as a function of an input electronic data stream; and

a receiver (i.e., optical receiver 104, Fig. 1) having an interferometer (i.e., splitter 115, delay line 110, combiner 116, Fig. 1) for reading received optical signals (col. 2, lines 30-67, col. 3, lines 1-67 and col. 4, lines 1-57).

Hansen differs from claims 1, 5, 18 and 22 in that he fails to teach the delay fiber is a delay loop fiber and a securing device for securing the delay loop fiber and the device is a card. However, Spanke in US Patent No. 5,572,350 teaches the delay fiber is a delay loop fiber (Fig. 1, col. 3, lines 5-64). Although Spanke does not specifically teach a securing device for securing the delay loop fiber. However, it would have been obvious to obtain a securing device in order to secure the delay loop fiber not to be loose. And, Choy in US Patent No. 5,825,949 teaches the device is card (Fig. 1, col. 3, lines 55-67 and col. 4, lines 1-67). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the delay loop fiber and the device is a card as taught by Spanke and Choy in the system of Hansen. One of ordinary skill in the art would have been motivated to do this since Spanke suggests in column 3, lines 5-64 and Choy suggests in column 3, lines 55-67 and col. 4, lines 1-67 that using such the delay fiber is a delay loop fiber and the device is card have advantage of allowing providing a desired delay and elements of device are located on a single card to save space, reduce size and weight and cost and to facilitate the insertion/removal of circuit cards into the system.

Regarding claim 2, Hansen further teaches discloses the light is a laser (Fig. 1).

Regarding claim 7, Hanse further teaches the interferometer includes a splitter and a coupler (Fig. 1).

Regarding claim 8, the combination of Hansen, Spanke and Choy teaches the card includes backplane made from a printed circuit board (Figs. 1-4 of Choy).

Regarding claim 10, the combination of Hansen, Spanke and Choy teaches the card is a replacement part for an existing optical multiplexer (Fig. 4B of Kimbrough, col. 11, lines 60-67 and col. 12, lines 1-38).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al (US Patent No. 6,271,950) and Spanke (US Patent No. 5,572,350) and in view of Choy et al (US Patent No. 5,825,949) further in view of Siegel (US Patent No. 4,998,295).

Regarding claim 3, the combination of Hansen, Spanke and Choy teaches all the aspects of the claimed invention set forth in the rejection to claim 1 above except fails to teach an energy level detector. However, Siegel teaches an energy level detector (16)(Fig. 1, col. 1, lines 45-67 and col. 2, lines 1-60). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the energy level detector as taught by Siegel in the system of the combination of Hansen, Spanke and Choy. One of ordinary skill in the art would have been motivated to do this since Siegel suggests in column col. 1, lines 45-67 and col. 2, lines 1-60 that using such an energy level detector has advantage of allowing detecting and monitoring the signal.

8. Claims 9, 17, 20, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al (US Patent No. 6,271,950) in view of Choy et al (US Patent No. 5,825,949).

Regarding claims 9, 17, 23 and 24, referring to Figure 1, Hansen discloses a device for transmitting data over at least one optical fiber, the device comprising:

a transmitter having at least one light source (i.e., CW laser 105, Fig. 1) and a phase modulator (i.e., phase modulator 106, Fig. 1) for phase modulating light from the source so as to create phase-modulated optical signals in the light as a function of an input electronic data stream; and

a receiver (i.e., optical receiver 104, Fig. 1) having an interferometer (i.e., splitter 115, delay line 110, combiner 116, Fig. 1) for reading received optical signals (col. 2, lines 30-67, col. 3, lines 1-67 and col. 4, lines 1-57).

Hansen differs from claims 9, 17, 23 and 24 in that he fails to teach the device is a card and a faceplate having a fiber tap signal device for indicating a fiber tap.

However, Choy in US Patent No. 5,825,949 teaches the device is card and a faceplate having a fiber tap signal device for indicating a fiber tap (Figs. 1, 3A and 4, col. 5, lines 55-67 and col. 6, lines 1-67 and col. 7, lines 1-64). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the device is a card and the faceplate having a fiber tap signal device for indicating a fiber tap as taught by Choy in the system of Hansen. One of ordinary skill in the art would have been motivated to do this since Choy suggests in column 5, lines 55-67 and col. 6, lines 1-67 and col. 7, lines 1-64 that using such the device is card card and the

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faceplate having a fiber tap signal device for indicating a fiber tap have advantage of allowing elements of device are located on a single card to save space, reduce size and weight and cost and to facilitate the insertion/removal of circuit cards into the system.

Regarding claim 20, Hansen further teaches the at least one light is laser (Fig. 1).

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al (US Patent No. 6,271,950) in view of Choy et al (US Patent No. 5,825,949) further in view of Siegel (US Patent No. 4,998,295).

Regarding claim 21, the combination of Hansen and Choy teaches all the aspects of the claimed invention set forth in the rejection to claim 17 above except fails to teach an energy level detector. However, Siegel teaches an energy level detector (16)(Fig. 1, col. 1, lines 45-67 and col. 2, lines 1-60). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the energy level detector as taught by Siegel in the system of the combination of Hansen and Choy. One of ordinary skill in the art would have been motivated to do this since Siegel suggests in column col. 1, lines 45-67 and col. 2, lines 1-60 that using such an energy level detector has advantage of allowing detecting and monitoring the signal.

Response to Arguments

10. Applicant's arguments with respect to claims 1-3, 5-10 and 15-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (703)306-5840.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

A handwritten signature in cursive script, appearing to read 'Hanh Phan', is written over a horizontal line.

Hanh Phan

07/01/2004